anxa
85-B
8290

CATALOGUE

—OF—

PHOTOGRAPHIC LENSES.

CONSISTING OF

PEERLESS PORTRAIT,

DARLOT PORTRAIT,

MORRISON'S LANDSCAPE,

CONDENSING LENSES, &c.

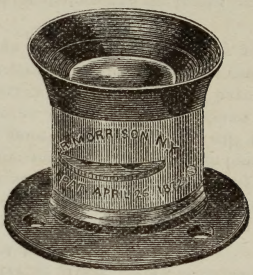
1876.

Examine the new Catalogue of the American Optical Company's Apparatus, to be had upon application.

MORRISON'S

Wide-Angle View Lenses,

Patented May 21st, 1872.



These Lenses are perfectly achromatic, and absolutely rectilinear; they embrace an angle of fully 100 degrees, and are the most rapid *wide-angle* Lenses made.

They are all supplied with revolving diaphragms, the openings of which are adapted to the focal length of their respective Lenses.

Where only a limited field is required, the full aperture may be used, while with the smaller stops, perfect definition is obtained to the margin of the next larger size picture than is named for each respective lens in the list below.

No. 00 to No. 5, are accurately matched in pairs for Stereo's, and if required, can be supplied to work four on a plate.

The shorter focused Lenses are especially adapted for street and other views in confined situations. For general purposes a pair of No. 5 Lenses, will be found most useful.

WIDE-ANGLE VIEW LENSES.—Continued.

No.	Diameter of Lens.	Size of Plate.	Equivalent Focus.	Price pr pair.	
00	$\frac{3}{4}$ inch.	$2\frac{1}{2}$ x $2\frac{1}{2}$ in.	$1\frac{3}{4}$ inch.	$60 00	These three sizes
0	$\frac{3}{4}$ "	3 x 3 "	$2\frac{1}{4}$ "	60 00	will fit into one
1	$\frac{3}{4}$ "	4 x 4 "	3 "	60 00	flange.
2	1 "	4 x 5 "	$3\frac{1}{2}$ "	60 00	
3	1 "	$4\frac{1}{2}$ x $7\frac{1}{2}$ "	$4\frac{1}{4}$ "	60 00	These five sizes
4	1 "	5 x 8 "	$5\frac{1}{4}$ "	60 00	will fit into one
5	1 "	$6\frac{1}{2}$ x $8\frac{1}{2}$ "	$6\frac{1}{2}$ "	60 00	flange.
6	1 "	8 x 10 "	8 "each	40 00	
7	$1\frac{1}{4}$ "	11 x 14 "	$10\frac{1}{2}$ " "	60 00	These 2 sizes will
8	$1\frac{1}{4}$ "	14 x 17 "	14 " "	80 00	fit into 1 flange.
9	$1\frac{1}{2}$ "	17 x 20 "	17 " "	100 00	These 2 sizes will
10	$1\frac{3}{4}$ "	20 x 24 "	22 " "	160 00	fit into 1 flange.

We copy the following article by Mr. Morrison, from THE PHOTOGRAPHIC TIMES, of April, 1876.

Nearly every photographer has his own idea as to what the focus of a lens should be for a given sized picture, but it is generally conceded that the plate should not (for artistic effect) be larger than the length of focus of the instrument. Although long focus lenses, no doubt, do produce more pleasing pictures, still the demand being for those of short focus and wide angle, it shows that the latter are more needed in practice than the former. I have been experimenting lately for the purpose of making a lens that combined short focus and wide angle with quick working qualities, and I think I have succeeded.

I have not altered the diameter of the lenses, as they were already smaller and thinner than any other achromatic view lens in the market; but by altering the relative position of the lenses, the angle is increased by about twenty degrees, so that they now illuminate a circle of about 110 degrees. I have at the same time done away with the necessity of using two glasses in the back, thus making it work quicker, as no light is lost from the reflection of two surfaces. Hence every lens will now cover the next size larger plate, as well as it did the smaller one previously. For instance: A 6-inch that was marked for a $6\frac{1}{2}$ x $8\frac{1}{2}$ will now cover an 8 x 10 with the same exposure, and will work for 6 x 8 with less time than before, and the corners will be perfectly illuminated, the original qualities of brilliancy of image being improved by the fewer surfaces in the back lens.

WIDE-ANGLE VIEW LENSES—Continued.

From my knowledge of all first class view Lenses, I claim for mine that they will cover a larger angle, work quicker, and give more depth and brilliancy without central spot or flare, and last though not least, they are cheaper.

In my lettered instruments for groups and copying, I have succeeded in combining perfection of definition with extreme rapidity. They work perfectly sharp with an aperture of from 1-8th to 1-10th of the focus.

To aid Photographers in the selection of Morrison's View Lenses, we append the following table showing height of image produced on the focusing glass with each size of instrument, by an object twenty-five feet high, at a distance of fifty feet:

Lens No.	Focal Length.	Height of Image.
1.	2 1-2 inches.	1 1-2 inches.
2.	3 "	1 3-4 "
3.	4 "	2 3-8 "
5.	5 "	3 "
6.	6 "	3 1-2 "
7.	8 "	4 1-4 "
8.	10 "	6 "
9.	13 1-2 "	7 3-4 "
10.	17 1-2 "	10 "

MORRISON'S NEW RAPID COPYING LENS.

This new Lens of Mr. Morrison's is confidently offered to the fraternity, in the belief that it is superior to any other make in the market, for *Copying*, *Out-door Groups*, and *Instantaneous Views*.

Letter.	Size of Group.	Size of Landscape.	Back Focus.	Equivalent Focus.	Each.
C	4 x 5 in	4½ x 7¼ in.	7¼ inches.	8¼ inches.	~~$47 00~~ 45.
CC	5 x 6 "	6½ x 8½ "	10¼ "	11 "	~~60 00~~ 60.
D	6½ x 8½ "	8 x 10 "	12¼ "	13 "	~~75 00~~ 70.
E	8 x 10 "	10 x 12 "	15 "	16 "	~~92 00~~ 80.
F	10 x 12 "	11 x 14 "	18 "	19½ "	~~128 00~~ 100.
G	11 x 14 "	15 x 18 "	23 "	24¾ "	~~170 00~~ 125.
B		6 "			40.

☞ LARGER SIZES TO ORDER.

☞ The CC Lenses can be supplied in matched pairs, for instantaneous stereo work.

RAPID GROUP LENSES.—Continued.

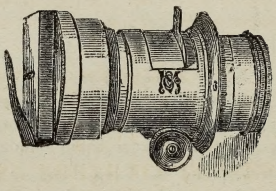
As an evidence of the high esteem in which MORRISON'S LENSES are held, we are constantly in receipt of the most flattering testimonials from the best Photographers throughout the land, who almost invariably decide to keep the Morrison, after competetive trial with lenses of other first-class makers.

The Centennial Photographic Company, who received from the Centennial Commission the exclusive concession of photographing within the Exposition Grounds, selected Morrison's lenses in preference to all others, and took *fifty pairs* of stereoscopic size, and *sixteen* single lenses for the use of their operators. For viewing they use no other lenses. The character of their work is sufficient illustration of the merits of the lenses with which it is made.

THE

"PEERLESS"

PORTRAIT LENS.



These Lenses will produce fine clear definition to the edges of the plates for which they are intended.

They possess absolute flatness of field, combined with great depth of focus.

Their visnal and chemical foci are in all instances coincident.

The utmost skill of the best opticians we can obtain, is employed in their production, and they will be found uniformly good ; we do not hesitate to have them compared with the *very best* high priced instru-

"PEERLESS" PORTRAIT LENS—Continued.

ments in the market, notwithstanding we charge less for them than half the price of other so-called first-class Lenses.

THE PEERLESS LENSES are all engraved with our monogram, S. M. Co., and the words *Peerless* and *Trade Mark* above and below thus :

PEERLESS.

TRADE MARK.

"PEERLESS" PORTRAIT LENSES,

OF THE

ORDINARY RAPIDITY.

No. 1, 1-4 size, double achromatic lenses, 1⅛ inches diameter, focal length 5 inches, Rack and pinion, and fitted with central stops, ... $12 50

No. 2, 1-2 size, double achromatic lenses, 2¼ inches diameter, focal length 6 inches, Rack and pinion, and fitted with central stops, ... 20 00

No. 3, 4-4 size, double achromatic lenses, 3 inches diameter, focal length 10½ inches, Rack and pinion, and fitted with central stops, ... 50 00

No. 4, Ex. 4-4 size, double achromatic lenses, 4½ inches diameter, focal length 15½ inches, Rack and pinion, and fitted with central stops, ... 125 00

For Lens No. 1. Distance from sitter, 13 feet for three inch figure.
" " 2. " " 17 " " " "
" " 3. " " 11 " " cabinet busts.

"PEERLESS" PORTRAIT LENSES.

Quick Acting.

These Lenses are made of as short focus as is consistent with sharp and correct marginal definition, flatness of field and depth of focus, and as their diameter exceeds that of the "Peerless" *ordinary* lens, they work much more rapidly. They are specially adapted for *short* exposures, and are indispensable in photographing children, etc.

For rapidity, roundness and *brilliancy*, they are unexcelled by lenses of other makers.

"PEERLESS" PORTRAIT LENSES.—Continued.

No. 1 A. 1-4 size, double achromatic lenses, 2⅛ inches diameter, focal length 4 inches, Rack and pinion, and fitted with five Waterhouse diaphragms in morocco case, $25 00

No. 2 A. 1-2 size, double achromatic lenses, 2⅝ inches diameter, focal length 7 inches, Rack and pinion, and fitted with seven Waterhouse diaphragms in morocco case, 40 00

No. 3 A. 4-4 size, double achromatic lenses, 3 inches diameter, focal length 9 inches, Rack and pinion, and fitted with eight Waterhouse diaphragms in morocco case, ... 60 00

No. 4 A, Ex. 4-4 size, double achromatic lenses, 4 inches diameter, focal length 14½ inches, Rack and pinion, and fitted with eight Waterhouse diaphragms in morocco case, ... 150 00

Nos. 1 A. and 2 A, can be had in matched pairs for making two or more pictures on a plate. No. 1 A. can be used for *carte de visites* in galleries too short to admit of working with No. 2 A., and will require only twelve feet from the subject to the ground-glass, for a three inch figure.

The following Table of distances from standing figure 5 feet 6 inches high, to the ground-glass for each lens, will enable operators to determine which size is best adapted to their galleries.

No. 1A Lens, for 3 inch figure, 13 to 15 feet.
" 2A " " 3 " " 16 to 17 "
" 3A " " 4 " " 8 feet.

☞ The following cautions in using both Portrait and Card Lenses, should be carefully observed by operators, and, if followed, will enable them to produce superior pictures without distortion.

In making full or half-length pictures from standing subjects, place the lens opposite the centre of the body, and keep the camera *level*. In groups it may be necessary to elevate the lens, but this should not be done unless the camera is made with the Double Swing-Back, as the shield or holder must *always* be exactly perpendicular to produce a picture free from distortion, and all in focus.

In full or half-length pictures it is necessary to incline the lens, in order to bring the forward as well as the back portions of the figure, in focus; but if the lens is inclined, the camera must be so arranged that the shield or holder remains perpendicular, and this can only be done with the Swing-Back attached to the American Optical Company's cameras.

"PEERLESS" PORTRAIT LENSES.—Continued.

These Lenses should always be focused upon the eye of the subject for either standing or sitting pictures.

As a general rule, keep the camera *level*, unless it is furnished with a Swing-Back.

"PEERLESS" PORTRAIT LENSES,

QUICK-ACTING STEREOSCOPIC.

These Lenses are especially designed for Stereoscopic Photography, and are so constructed that they will work well for interiors or exteriors.

They are particularly adapted for instantaneous work.

Diameter of Lenses, 1¼ inches; focal length, 3½ inches.

By removing the back lens and substituting the front combination, a focal length of 5½ inches is obtained.

They are supplied with six Waterhouse diaphragms in morocco case.

Price per pair, ... $25 00

DARLOT LENSES.

Darlot is one of the oldest and most reliable of European opticians. He was for many years partner of the celebrated Jamin. The firm did a successful business for many years under the firm name of Jamin & Darlot. Since the death of Jamin, Darlot has continued the manufacture of Photographic objectives, and his lenses enjoy an excellent reputation, having achieved the distinction of the highest awards at the London, Paris, and Vienna Expositions.

We import these lenses in all styles, and keep a large stock constantly on hand.

DARLOT GEM LENSES.

1-9 size, plain barrel tubes,	$3 20
1-6 " "	4 50
1-4 " "	5 50
1-4 " central stops,	7 00

We supply these tubes in matched sets of 4, 6, 8, 9, or more, if desired.

DARLOT PORTRAIT LENSES.

Supplied with Rack and Pinion, but without Central Stops.

1-4 size,	$8 00
1-2 size,	16 50
4-4 size,	37 50

The 1-4 and 1-2 sizes can be furnished in matched pairs.

DARLOT PORTRAIT LENSES.

Supplied with Rack and Pinion and Central Stops.

1-4 size,	$10 00
1-3 size,	16 50
1-2 size,	19 00
4-4 size, For 8x10 plates and smaller.	42 00
8-4 size, For 11x14 " "	125 00
Mammoth size 14x17 " "	215 00

The 1-4, 1-3 and 1-2 sizes can be furnished in matched pairs.

DARLOT QUICK-WORKING LENSES.

Supplied with Rack and Pinion and Central Stops.

1-2 size,	$25 00
2-3 size,	37 50
4-4 size,	50 00
Ex. 4-4, For 8x10 plates and smaller.	95 00

IMITATION DALLMEYER'S STEREOSCOPIC LENSES.

These lenses are made expressly for us, and are well adapted for out-door and in-door stereoscopic work and instantaneous views.

Focal length, four inches, or by taking out back lens, and using the front lens in its place, you have six inches focal length.

Price, per pair, ... $20 00

CONDENSING LENSES.

These are made of the finest Crown Glass, and are of superior quality.

ORDINARY.

6 inch diameter,	. .	15 inch focus,	$ 8 25
7 "	. .	15½ "	9 50
8 "	. .	16 "	11 00
9 "	. .	21 "	12 50
10 "	. .	25 "	13 50
11 "	. .	28 "	19 00
12 "	. .	32 "	22 00
13 "	. .	39 "	27 50
14 "	. .	44 "	50 00

WHITE GLASS.

6 "	. .	9 inch focus,	10 75
7 "	. .	9 to 11 "	12 25
8 "	. .	13 "	15 00
9 "	. .	17½ "	19 00
10 "	. .	20 "	22 00
11 "	. .	22 "	55 00
12 "	. .	16 to 20 "	
14 "	. .	20 to 22 "	100 00

EXTRA WHITE GLASS.

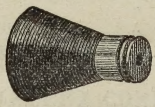
10 inch diameter,	. .	14 inch focus,	35 00
12 "	. .	16 "	50 00
14 "	. .	18 "	70 00
16 "	. .	21 "	87 50

Larger sizes imported to order.

MAGIC LANTERN CONDENSERS.

4½ inch diameter,	mounted in brass,	per pair of two lenses,		$10 00
4½ "	not mounted	"	"	8 50
4½ "	"	"	"	9 00
5 "	"	"	"	10 00

SCOVILL'S FOCUSING GLASS.



PRICE, $4 00

This little instrument will be found invaluable in obtaining the correct focus upon the ground-glass. It has a magnifying power of two times, and is arranged with a bell-shaped tube to rest upon the ground-glass, thus excluding all outside light, and is adjusted by a screw, with a ring for holding it in place when set. Operators can have no more useful instrument in their possession.

To adjust the lens, loosen the set ring, place a small piece of paper upon the ground side of the ground-glass, place the mouth of the tube against the other, and adjust the screw until an exact focus is obtained; then screw down the set ring, and the instrument is ready for use. It saves the eyes greatly.

CENTRAL STOPS, FLANGES AND CAPS.

We supply extra Stops, Flanges, and Leather Caps, for "Peerless" or Darlot Lenses, at the following prices:

Sizes.	Central Stops.	Flanges.	Leather Caps.
Stero. Lenses, per set,	$1 50	$0 75	$0 50
1-4	" 1 50	0 75	0 75
1-3	" 1 75	0 80	0 80
1-2	" 2 00	1 00	1 00
2-3	" 2 25	1 25	1 10
4-4	" 2 50	1 50	1 25
Ex.4-4	" 3 00	3 00	2 50

FOR MORRISON'S LENSES.

Flanges, all sizes, each,	$1 00
Caps, " "	50
Stops for Rapid Group Lenses,	60